Amendments to the ~~Claims~~:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A fuel cell system comprising:

a fuel cell stack supplied with fuel gas and oxidant gas to generate an electric power which is supplied through a diode to a load installed on a fuel cell powered vehicle;

a secondary battery by which an electric power is charged and discharged;

an electric power converter connected to the fuel cell stack through the diode to convert an electric power level, charged in the secondary battery, and supplying a converted electric power to the load; and

a controller operative to control the electric power converter under two control modes during start-up of the fuel cell stack, the two control modes including: a first control mode in which ~~in a way to allow~~ a voltage level of the electric power, to be supplied from the secondary battery to the load, ~~to lie~~ lies at a value equal to or greater than an open voltage level of the fuel cell stack ~~during start-up of the fuel cell stack,~~; and a second control mode in which ~~to control the electric power converter in a way to allow~~ an electric power level supplied to the load through the electric power converter ~~to be~~ is detected for permitting the electric power to be supplied to the load from the secondary battery at an electric power level less than a detected electric power level.

2. (Original) The fuel cell system according to claim 1, wherein the controller controls the electric power converter in a way wherein, if an output electric current of the fuel cell stack, appearing when the electric power level supplied from the secondary battery to the load is decreased, is greater than a given value, reduction in the electric power level is interrupted.

3. (Original) The fuel cell system according to claim 1, wherein the controller controls the electric power converter in a way wherein, if an output voltage of the fuel cell stack, appearing when the electric power level supplied from the secondary battery to the load is decreased, is less than a given value, reduction in the electric power level is interrupted.

4. (Original) The fuel cell system according to claim 1, wherein the controller controls the electric power converter in a way to allow the temperature of the fuel cell stack, appearing when the voltage level of the electric power supplied from the secondary battery to the load is selected to lie at a value equal to the open voltage level of the fuel cell stack or at a value greater than the open voltage level of the fuel cell stack, to be detected whereupon, if the detected temperature of the fuel cell stack is less than a given value, the electric power converter detects the electric power level supplied to the load to allow the secondary battery to supply the electric power to the load at an electric power level less than resulting detected electric power level.

5. (Original) The fuel cell system according to claim 1, wherein the controller controls the electric power converter in a way to allow the voltage level of the fuel cell stack, appearing when the voltage level of the electric power supplied from the secondary battery to the load is selected to lie at a value equal to the open voltage level of the fuel cell stack or at a value greater than the open voltage level of the fuel cell stack, to be detected whereupon a timing, at which the electric power level to be supplied to the load through the electric power converter, is controlled depending upon a rise-up condition of the detected voltage level of the fuel cell stack.

6. (Currently Amended) A fuel cell system comprising:

a fuel cell stack supplied with fuel gas and oxidant gas to generate an electric power which is supplied through a diode to a load installed on a fuel cell powered vehicle;

a secondary battery by which an electric power is charged and discharged;

electric power ~~converter~~ converting means connected to the fuel cell stack through the diode and converting an electric power level, charged in the secondary battery, to be supplied to the load; and

control means operative to control the electric power ~~converter~~ converting means under two control modes during start up of the fuel cell stack, the two control modes including: a first control mode in which ~~in a way to allow~~ a voltage level of the electric power, to be supplied from the secondary battery to the load, ~~to lie~~ lies at a value equal to or greater than an open voltage level of the fuel cell stack ~~during start up of the fuel cell stack,;~~ and a second control mode in which ~~to control the electric power converter means in a way to allow~~ an electric power level supplied to the load through the electric power ~~converter~~

converting means ~~to be~~ is detected for permitting the electric power to be supplied to the load from the secondary battery at an electric power level less than a detected electric power level.

7. (Currently Amended) A method of controlling a fuel cell system, which has a fuel cell stack supplied with fuel gas and oxidant gas to generate an electric power which is supplied through a diode to a load installed on a fuel cell powered vehicle, and a secondary battery by which an electric power is charged and discharged, the method comprising:

converting a level of an electric power of the secondary battery to supply the electric power from the secondary battery to the load at a converted electric power level;

controlling the fuel cell system such that, when starting up the fuel cell stack, a voltage level of the electric power to be supplied from the secondary battery to the load lies at a value equal to or greater than an open voltage level of the fuel cell stack; and

controlling the fuel cell system such that the level of the electric power supplied to the load is detected to permit the electric power to be supplied to the load from the secondary battery at an electric power level less than a detected electric power level.

8. (New) The fuel cell system according to claim 1, wherein the controller controls the fuel cell stack such that the fuel cell stack is kept in a stand-by state during the start-up of the fuel cell stack when an output electric current of the fuel cell stack increases beyond a threshold electric current value.

9. (New) The fuel cell system according to claim 1, wherein the controller controls the fuel cell stack such that the fuel cell stack is kept in a stand-by state during the start-up of the fuel cell stack when a phase of an output voltage of the fuel cell stack drops below a threshold output voltage value.

10. (New) The fuel cell system according to claim 5, wherein the controller controls the electric power converter such that when the rise-up condition of the detected power level of the fuel cell stack is slower than a predetermined rise-up condition, then a timing at which electric power is taken out from the fuel cell stack is delayed from a pre-existing timing, in order to stabilize the fuel cell stack.